

BIF Hosted in Mississippi

Highlights of the 2015 Beef Improvement Federation (BIF) Annual Meeting and Research Symposium

by Troy Smith



Whether they know it or not, cow-calf producers are the beneficiaries of work accomplished by the Beef Improvement Federation (BIF). Even producers that don't use modern tools for genetic selection benefit, because their seedstock suppliers do use technologies furthered by BIF. According to Twig Marston, chief executive officer for the Red Angus Association of America, BIF developed standardized collection and analyses of cattle performance data and championed the application of technologies including expected progeny difference (EPD) values, ultrasound carcass measurements and DNA testing.

During the BIF Annual Meeting and Research Symposium hosted June 9-12 in Biloxi, Miss., Marston said Colorado Hereford breeder Ferry Carpenter and University of Nebraska animal scientist Frank Baker were among the visionaries responsible for establishing BIF. Chartered in 1968, the organization began as a collaboration of state beef improvement associations.

"A new generation of 'BIFers' represents a mix of academia and industry," Marston said. "They are building on the culture of those pioneers, believing cattle selection should be based on facts and figures, not fads."



Twig Marston

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John Paterson

Rebuilding the herd

The theme of the 2015 meeting was "Rebuilding the Cow Herd," and National Cattlemen's Beef Association (NCBA) Director of Education John Paterson set the stage for subsequent speakers. Paterson recounted reasons why, in recent years, the U.S. beef cow tally declined from 40 million head to around 28 million. Drought was a huge factor, but high operating costs, advancing producer age and shifts in agricultural land usage were contributors.

Now that favorable moisture conditions have returned to much of cow country, improving feed and forage supplies, expansion of cow inventory has begun. According to Paterson, 72% of total herd growth is expected to occur in the Southern Plains. If beef supply and demand fundamentals remain favorable too, Paterson said national numbers could return to near pre-drought levels within a few years.



Sara Place

Sustainability is key

Of course, the industry faces challenges going forward. Among them, said Oklahoma State University animal scientist Sara Place, are public perceptions of animal agriculture management systems and their sustainability. But "sustainability" means different things to different people. For beef producers, Place explained, maintaining sustainability is about balancing economic, environmental and social concerns. Place warned that misinformation about beef production practices is a problem that producers cannot ignore.

"We need the trust of consumers," Place stated. "It is really much more complicated than educating the public. It has to be two-way communication."

Also addressing the subject of sustainable beef production, Kim Stackhouse-Lawson, NCBA director of sustainability, said many people simply don't understand that everything people do — every activity — has an impact. Nowhere do conditions remain static.



Kim Stackhouse-Lawson

"Zero impact is not possible. There are tradeoffs, and food production will result in an impact," Stackhouse-Lawson stated. "Sustainability is about producing more with less, long term. The goal is improvement over time."

Citing results from the beef industry sustainability research project, Stackhouse-Lawson said lifecycle assessment of U.S. beef production shows the industry as a whole is making continuous improvement in multiple areas. Positive changes since 2005 include:

- Energy use reduced by 2%
- Greenhouse gas emissions to soil reduced by 2%
- Emissions to soil reduced by 7%
- Emissions to water reduced by 10%
- Water usage reduced by 3%
- Occupational illness and accidents reduce by 32%



John Michael Riley

Economics of expansion

Numerous BIF speakers acknowledged the obvious economic incentives for breeding herd expansion. Whether they are expanding or not, John Michael Riley advised cow-calf producers to keep a tight rein on production costs. The Oklahoma State University economist said even high-cost producers may be making money now, but high cattle prices won't last forever. In his opinion, managing costs is essential to maintaining profitability, regardless of herd size.

"Reducing non-feed costs is paramount," Riley said, but warned against indiscriminate cost-cutting.

"Right now the market is putting a little extra cash in your pocket," added Riley. "Take that cash and do something with it. Improve your infrastructure, improve your genetics as much as possible and that's going to increase the productivity of your herd."



Ken Stewart



Cliff Lamb

Maximizing production

Also on the conference agenda were presentations by commercial cattle producers, including Ken Stewart of Okeechobee, Fla. Stewart manages Rollins Ranches, which graze 10,000 mother cows among four locations. As a first step toward successful genetic selection, he emphasized the need to match the breeding female's biological type with the production environment.

"Cattle must fit the environment," Stewart said. "I'm unaware of an instance where it is cost-effective to make the environment fit the cattle. I believe in raising your own replacement females. If you're going to buy them, purchase heifers from a single source — one where you have the ability to evaluate the cow herd and know they would work in your own environment."

Stewart called EPDs a highly valued selection tool. He advised use of EPDs to optimize rather than to maximize production. Selection indices are another tool he uses as a way to evaluate a blend of useful genetic traits. Stewart also selects on the basis of phenotype, but avoids extremes.



C.J. Blew

Part of a family farming and ranching partnership, C.J. Blew also retains home-raised females, emphasizing selection for type, quality and functionality. Located near Hutchinson, Kan., the Blew family markets replacement heifers as well as feeder cattle. Blew told the symposium audience that heifer selection really begins with sire selection. Blew also uses selection indices, but he advised fellow producers to know what traits are included in an index,

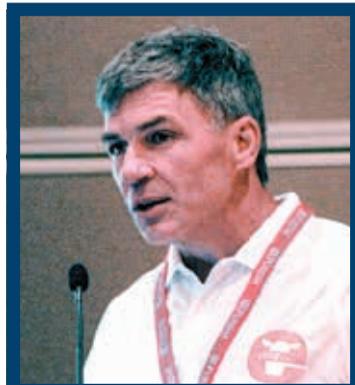
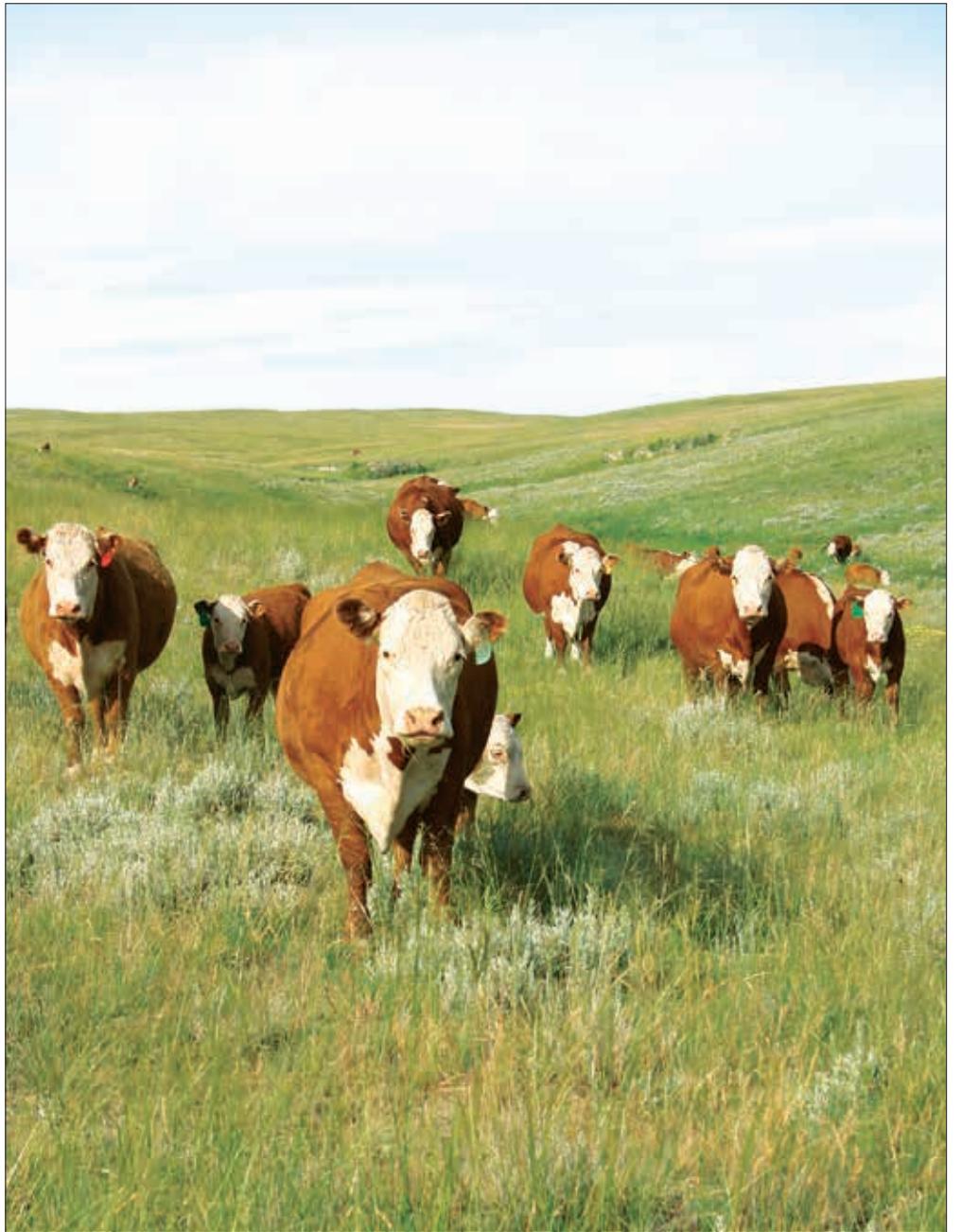
along with how the traits are weighted in its calculation. In contrast to Rollins Ranch, Blew does use DNA testing.

"Every sire we use is DNA-tested, but that's no reason to abandon (progeny) performance testing," he said. "We collect performance data. The challenge is to manage it. We're seeking help with that and hope to establish in-herd EPDs."

Speaking during the National Association of Animal Breeders Symposium, which was held in conjunction with the BIF conference, University of Florida reproductive physiologist Cliff Lamb urged producers to consider the economic advantages of estrus synchronization and artificial insemination (AI). Since coming to the North Florida Research and Education Center (NFREC), Lamb has converted the center's herd from a 120-day breeding season to a 70-day season using AI, estrus synchronization and a strict culling rule eliminating any replacement heifers that fail to become pregnant in the first 25 days. After implementing timed-AI protocols consistently for five years, NFREC herd value was increased by \$50,000.

Lamb said many commercial cow-calf producers have shied away from AI, complaining that it is too much of "a hassle." As excuses, they cite facility and labor requirements, along with complicated synchronization protocols. But Lamb advised producers to consider how costs of bulls used for natural service and the value of marketed calves have increased, while costs associated with synchronized AI have changed little. He sees significant opportunity for producers that adopt reproductive technologies to shorten their breeding and calving seasons, increase uniformity of calf crops and enhance genetic improvement.

During a technical breakout session, University of Kentucky animal scientist Darrh Bullock, introduced *eBEEF.org*, an online resource for the public to access information about beef cattle genetics and genomics. Bullock said cattle specialists from six land-grant institutions



Darrh Bullock



Craig Bieber

have joined forces to provide educational materials through the new website.

"Often, beef producers get frustrated when they search for information online and get information overload. We wanted to develop a user friendly site that provides information in a concise, understandable way without having to sort through enormous amounts of information," Bullock explained.

The site includes fact sheets, videos, recordings from conferences and answers to frequently asked questions. An "Ask the Expert" section allows users to find answers to specific questions related to all aspects of beef cattle production.

BIF leadership

Among BIF business matters was a change in leadership. South Dakota Red Angus breeder Craig Bieber ascended to BIF's presidency, and Mississippi State University researcher and extension specialist Jane Parrish assumed the duties of executive director. The 2015 BIF Annual Convention was hosted by Mississippi State University and the Mississippi Extension Service. The 2016 event is to be held in Manhattan, Kan., hosted by Kansas State University. **HW**